## CLAIMS

1 1. A device for axial stopping of a rotor in particular an armature of an 2 electric motor, for balancing machines, said rotor (5) having a support shaft (4) 3 defining a rotation axis (4a) and two end faces (4b) transverse to said rotation axis (4a), said device comprising at least one thrust unit having an abutment 5 surface (8) adjacent to one said end face (4b) and adapted to exert a repulsive force on said end face (4b) able to axially stop said support shaft (4) and to 6 7 maintain an interstice (1a) between said abutment surface (8) and said end face (4b) of said support shaft (4). 2. A device as claimed in Claim 1, wherein said thrust unit comprises fluid-1 emitting means (9) to form a layer of fluid between said abutment surface (8) and 2 end face (4b), said layer of fluid exerting said repulsive force and defining said 3 interstice (1a). 3. A device as claimed in Claim 2, wherein said fluid dispensed by said 2 emitting means (9) is air under pressure. 1 4. A device as claimed in Claim 3, wherein said thrust unit comprises an 2 abutment element (10) defining said abutment surface (8) on a face thereof and 3 having at least one hole (11) for passage of said air under pressure at said 4 abutment surface (8). 1 5. A device as claimed in Claim 4, wherein said abutment element (10) is a 2 foil element and wherein said at least one hole (11) is a through hole formed in 3 said foil element (10). 1 6. A device as claimed in Claim 4, wherein said emitting means (9) comprises at least one pipe (13) for feeding air under pressure and one sleeve

(12) placed at the end of said feeding pipe (13) and engaged with said abutment

- 4 element (10) at said at least one hole (11).
- 7. A device as claimed in Claim 6, wherein said abutment element (10)
- comprises attachment members (15) rigidly mounted thereon, for connection with
- 3 said sleeve (12).
- 1 8. A device as claimed in Claim 7, wherein said attachment members (15)
- 2 comprise a threaded block (16) susceptible of being engaged by screwing by
- 3 said sleeve (12).